

HOUSING POLICY IS CLIMATE POLICY

MAY 5, 7:00PM



Town of Arlington | Department of Planning & Community Development,
in collaboration with Sustainable Arlington

Agenda

- 7:00 PM Welcome
- 7:05 PM Planning for Housing & Climate in Arlington
- 7:15 PM Panelist Introductions & Presentations
- 7:50 PM Moderated Q&A
- 8:30 PM Adjourn



PLANNING FOR HOUSING & CLIMATE IN ARLINGTON

Department of Planning & Community Development
Housing & Climate Panel
May 5, 2022 | Jennifer Raitt, Talia Fox

Arlington's Approach

- Climate change
 - Reduce greenhouse gas emissions (pollutants that cause climate change)
 - Adapt to and mitigate climate change impacts
- Housing
 - Enhance availability and affordability of housing
 - Eliminate structural barriers to housing choice



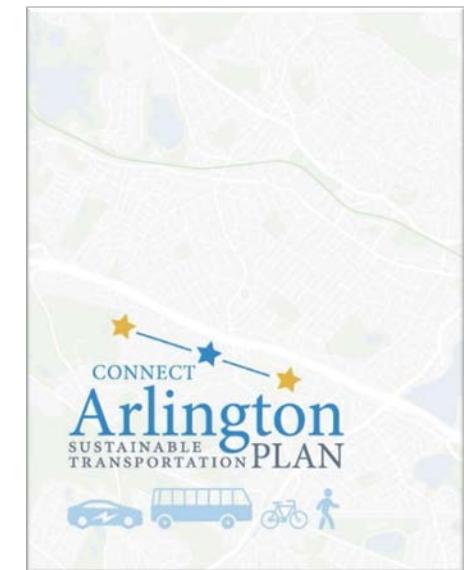
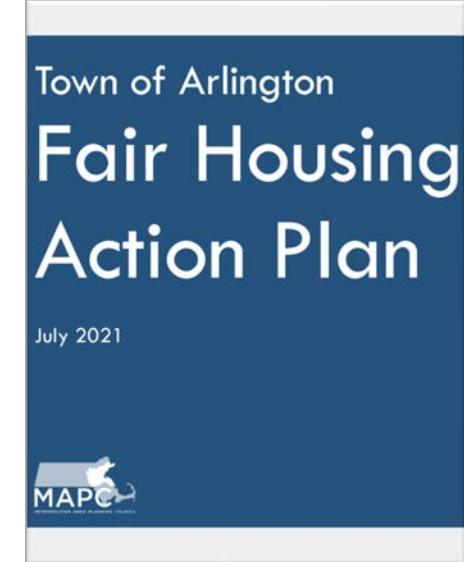
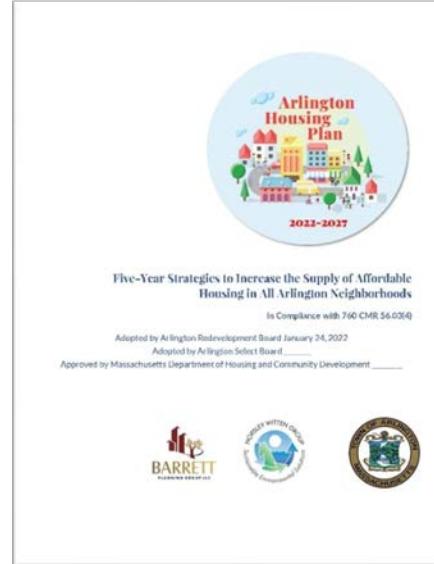
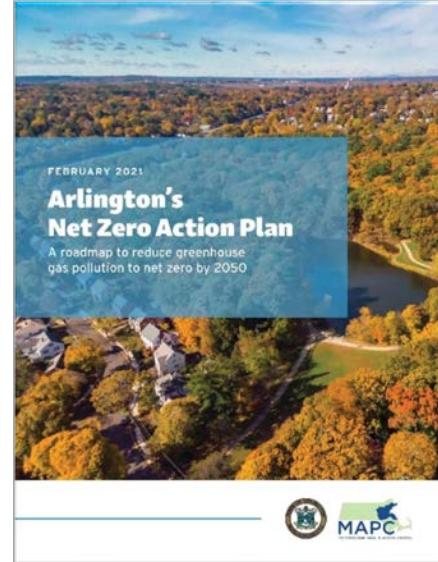
Key Plans

Net Zero Action Plan
(2021)

Connect Arlington
Sustainable
Transportation Plan
(2021)

Fair Housing Action Plan
(2021)

Housing Production Plan
(2022)



Key Plans

Net Zero Action Plan

A roadmap to reduce greenhouse gas pollution in Arlington to net zero by 2050

Connect Arlington

Strategies to provide a safe, reliable, multimodal transportation network that meets the needs of all people of all ages and abilities

Fair Housing Action Plan

Actions to achieve equitable access to housing choice and eliminate housing discrimination and residential segregation

Housing Plan

Strategies to increase the supply of affordable housing in all Arlington neighborhoods



Shared Themes

- Equity & Environmental Justice
- Mobility & Accessibility
- Affordability
- Resource Efficiency
- Increased Choice/Options
- Public Health
- Resilience

Equity & Environmental Justice

Net Zero Action Plan

Connect Arlington

Fair Housing Action Plan

Housing Plan

“Socially or economically disadvantaged people are likely to experience greater harm from climate change...”

“Safe facilities for all users, no matter how they travel”

Affirmatively Furthering Fair Housing means
“taking steps proactively to address significant
disparities in access to community assets”

“Make equitable access to shared green
spaces and a healthy living environment a
priority for siting affordable homes”

Mobility & Accessibility

Net Zero Action Plan

Connect Arlington

Fair Housing Action Plan

Housing Plan

"To reach our net zero goal, the Town will have to... [help] people drive less by giving them better options"

"transit options... through local shared transportation programs"

"Reform the Zoning Bylaw to encourage development that increases fair housing choice."

"Targeting new housing to areas that can take advantage of transit, walking, and biking..."

Affordability

Net Zero Action Plan

Connect Arlington

Fair Housing Action Plan

Housing Plan

“ensure those [mitigation] strategies do not...significantly [increase] the cost of housing or utilities”

“not every individual or household wants to or can afford to own a car, or more than one car”

“Consider district density and dimensional regulations for development that is 100% affordable housing.”

“Review and update...zoning and other housing policies to encourage... affordable housing and fair housing choice”

Resource Efficiency

Net Zero Action Plan

Connect Arlington

Fair Housing Action Plan

Housing Plan

“Making homes and buildings super-efficient...will help us reduce emissions and make energy bills more affordable”

“...put more efficient and low-polluting modes first...and put single-occupancy vehicles (SOVs) lowest on the priority list”

“Offer grants or low-interest loans to retrofit historic housing for accessibility.”

“reuse of existing structures... within walking distance of schools, public parks, services, amenities, and transit”

HOUSING POLICY IS CLIMATE POLICY

MAY 5, 7:00PM



THANK YOU

Jenny Raitt | Director

Talia Fox | Sustainability Manager

Department of Planning & Community Development

Town of Arlington | tfox@town.arlington.ma.us

Panelists



Lauren Baumann
Vice President
New Ecology



Zoe Weinrobe
Director of Real Estate
2Life Communities



Emily Jones
Senior Program Officer
Green Homes
LISC Boston



Michelle Apigian
Associate Principal
ICON Architecture

What Is Driving Housing Decarbonization?

- **State Regulations**
 - State Emissions Goals
 - Energy Code Updates (Stretch and Net Zero)
- **Incentives**
 - Low-Income Housing Tax Credits
 - Mass Save - new programs/guidelines
- **Local Regulations**
 - Local Zoning Updates (e.g. Article 37 in Boston, Article 22 in Cambridge)
 - Local Building Performance Standards (e.g. BERDO in Boston, BEUDO in Cambridge)
- **Grassroots Advocacy**
 - Special Permit Pressure
 - Local Gas Ban Ordinances
- **What About Embodied Carbon?**

How Do We Decarbonize Equitably?



- **Support upfront capital costs**
 - Address pre-weatherization and related barriers
 - Leverage available resources to go deeper
- **Address operating costs**
 - Protect people from cost increases in transition from fossil fuels to all-electric (affordable electricity rates)
 - Provide access to affordable renewable energy and storage
- **Provide accessible building decarbonization job training and career opportunities**

How You Can Support an Equitable Transition

1. Opt-in to the new Net Zero Municipal Code to ensure high performance new construction (specifically Passive House for multifamily).

2. Endorse the HERO Campaign for Affordable Housing + Climate Investments: mahousingclimate.org



3. Ask your legislators to support the Zero Carbon Renovation Fund for equitable decarbonization resources: bit.ly/ARPASignOn



Arlington EcoWeek Housing & Climate Panel

May 5, 2022



2Life at a Glance

- Founded in 1965
- Award-winning **developer, owner, property manager, and service provider**
- 1,378 apartments (83% are deeply subsidized)
- Over 1,600 older adults from 30 countries
- **Aging in Community** with supports and services
- High capacity real estate team



Ulin House
Brighton, MA



Leventhal House
Brighton, MA



Kurlat House
Brighton, MA



Weinberg House
Brighton, MA



Coleman House
Newton, MA



Shillman House
Framingham, MA



Golda Meir House
Newton, MA



Brown Family House
Brookline, MA

The Myth of “Aging In Place”

According to AARP, nearly 90% of older Americans say they want to “age in place.”

“This is both foolish and unsustainable. We can do better. Aging is, and always has been, a team sport. The myth of ‘aging in place’ harms people by defining the decision to share one’s daily life with others as failure.”

– Dr. Bill Thomas

2Life's Aging in Community Model



2Life Site Selection Criteria

- Who are we trying to serve?
- What supports can we provide?
- Village centers
- Close to transportation
- Operating efficiency
- Land cost and condition



Recent Renovations

- **Golda Meir House** - 2017-2018 occupied rehab
 - 199 apartments, \$34.5 million renovation, Enterprise Green Communities
 - Sustainability Highlights: High efficiency central HVAC system; envelope upgrades with exterior wall insulation, new roof and windows; Energy Star appliances; LED lighting; low-flow fixtures
 - Pounds of CO2/sf decreased **over 30%** as a result of the renovation
- **Kurlat House** - 2016-2017 occupied rehab
 - 209 apartments, \$36.3 million renovation, Enterprise Green Communities
 - Sustainability Highlights: High efficiency central heating system; envelope upgrades; Energy Star appliances; LED lighting; low-flow fixtures



Brown Family House, Brookline

- 64 apartments, multiple tiers of affordability from 30% AMI to unrestricted, completed in 2020
- Enterprise Green Communities certified
- Car free building for residents
- Solar thermal hot water system
- Permeable pavers
- Tight building envelope with a high quality air barrier
- High efficiency VRF heating and cooling system
- LED light fixtures, Energy Star appliances and low-flow plumbing fixtures with unit-level metering for ongoing tracking





JJ Carroll Redevelopment, Brighton

- 142 apartments, 100% affordable, connected to 2Life Brighton campus, currently under construction
- Redevelopment of a former Boston Housing Authority property
- On-site PACE Center
- First 2Life Passive House project, LEED Silver certifiable
- 400 KW solar PV system
- Permeable pavers
- Tight building envelope with a high quality air barrier
- High efficiency VRF heating and cooling system
- LED light fixtures, Energy Star appliances and low-flow plumbing fixtures with unit-level metering for ongoing tracking





High Density Affordable (Senior) Housing is Green!

- Zoning to allow higher density developments with reduced parking close to transit
- Larger buildings allow developers to spread costs to more units, allowing for deeper levels of affordability
- Larger buildings use significantly less energy, fewer building materials, reduced auto-dependence, etc. per apt/household
- Economies of scale allow for deeper level of supportive services
- Elevator buildings with universal design features allow seniors to age in community
- Frees up older single, two- and three-family housing stock for young families



Thank you!

Zoe Weinrobe
zweinrobe@2lifecommunities.org



30 Wallingford Road | Brighton, MA 02135 | 617-912-8400 | 2LifeCommunities.org



Arlington EcoWeek

Housing and Climate Panel

Presented by: Michelle Apigian AIA, LEED AP, AICP, CPHC

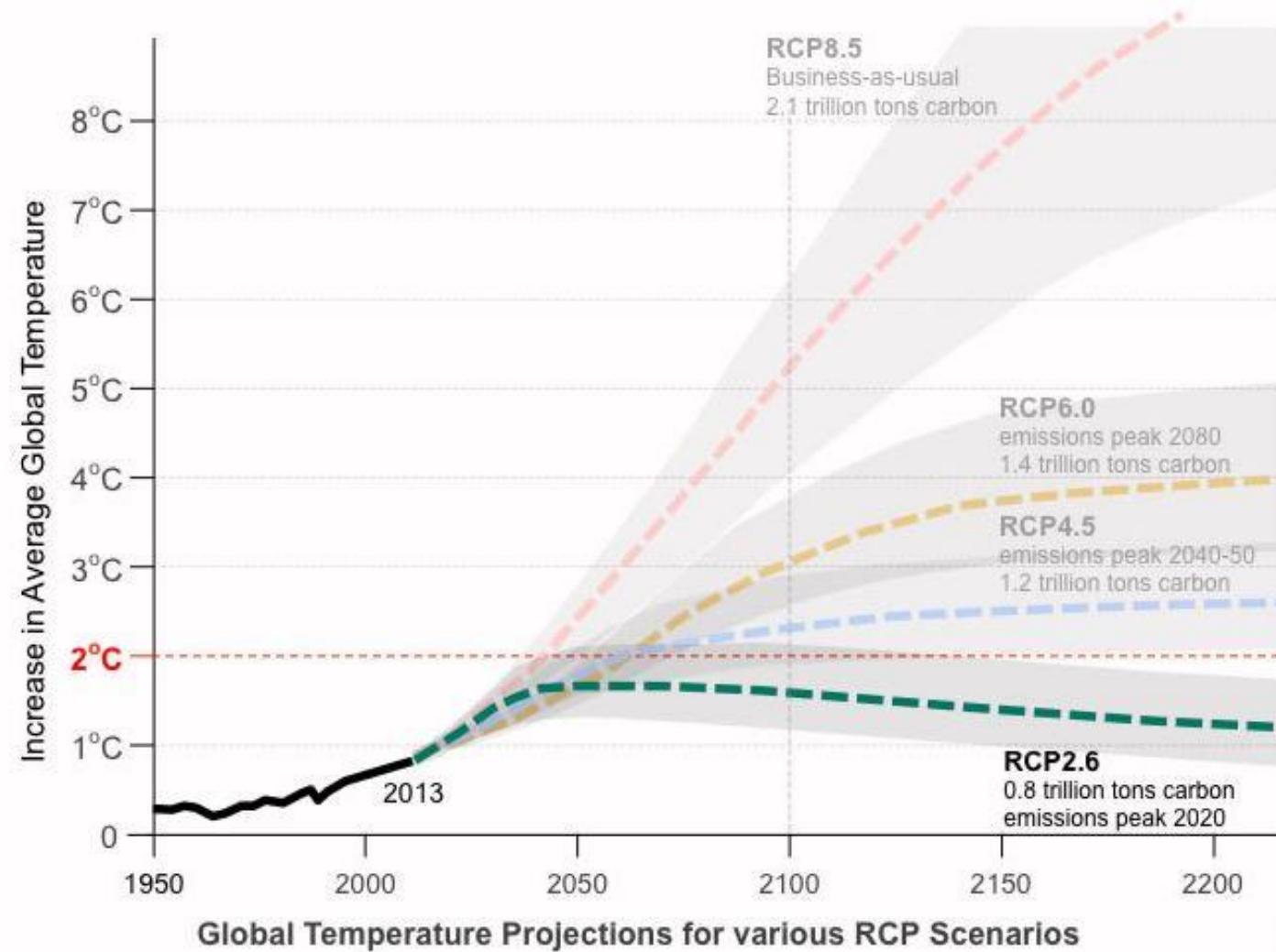


Women-Owned Boston-based Focused on Sustainable Communities



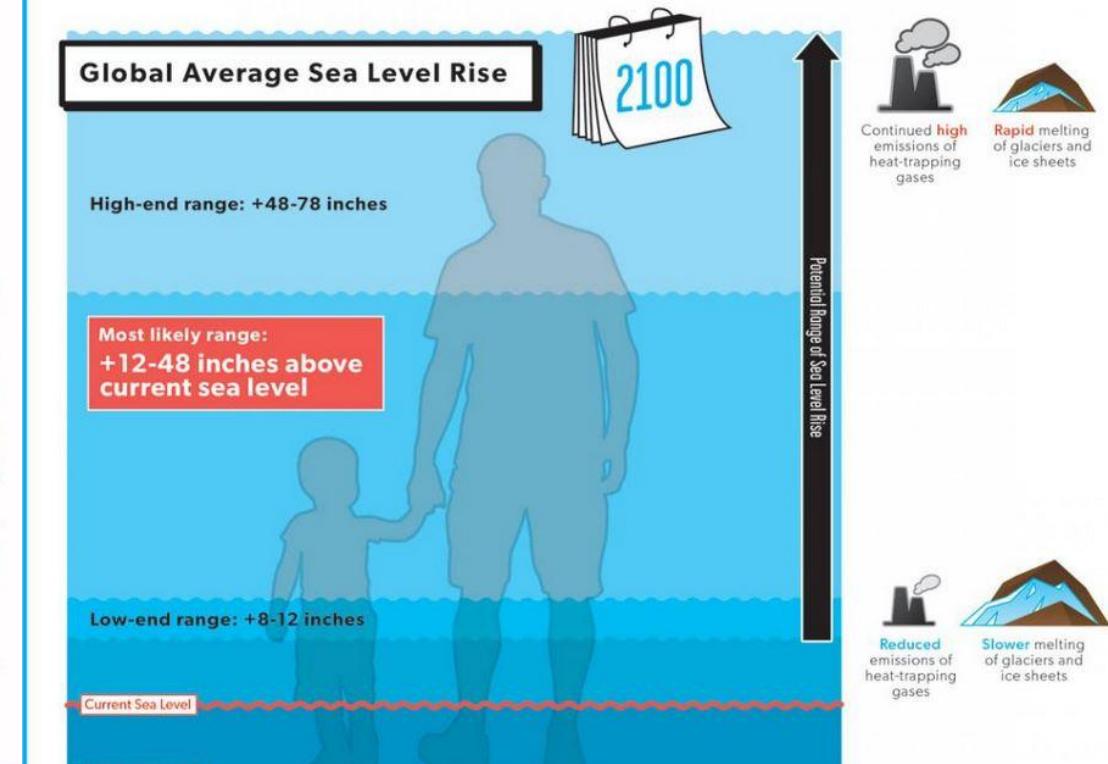
| INSTITUTIONAL | RENEWAL | RESIDENTIAL |
|--|---|--|
| College + University <ul style="list-style-type: none"> • Academic • Libraries • Performing Arts • Specialized Teaching Spaces • Space Programming | Adaptive Reuse + Renovation <ul style="list-style-type: none"> • Historic Schools • Mills / Factories • Municipal Buildings • College + University Buildings | Market Rate <ul style="list-style-type: none"> • Transit-Oriented Design • Mid-Rise • High-Rise • Modular • Tall Wood |
| Municipal <ul style="list-style-type: none"> • Town/City Halls • Performing Arts • Space Programming | Repair + Modernization <ul style="list-style-type: none"> • MSBA Accelerated Repairs • Building Envelope • Accessibility • Facilities Assessments | Workforce/Affordable <ul style="list-style-type: none"> • LIHTC • HTC [historic tax credit] • 40B [entitlement/approval process] |
| State <ul style="list-style-type: none"> • House Doctor • Certifiable Building Studies • Feasibility Studies • DCAMM Small Projects Group • DYS | Occupied Rehab <ul style="list-style-type: none"> • Energy Conservation Upgrades • Re-programming • Re- Positioning | Special Populations <ul style="list-style-type: none"> • Veterans • Senior [with supportive services] • Artists • Previously Homeless |

WE CAN INFLUENCE THE FUTURE



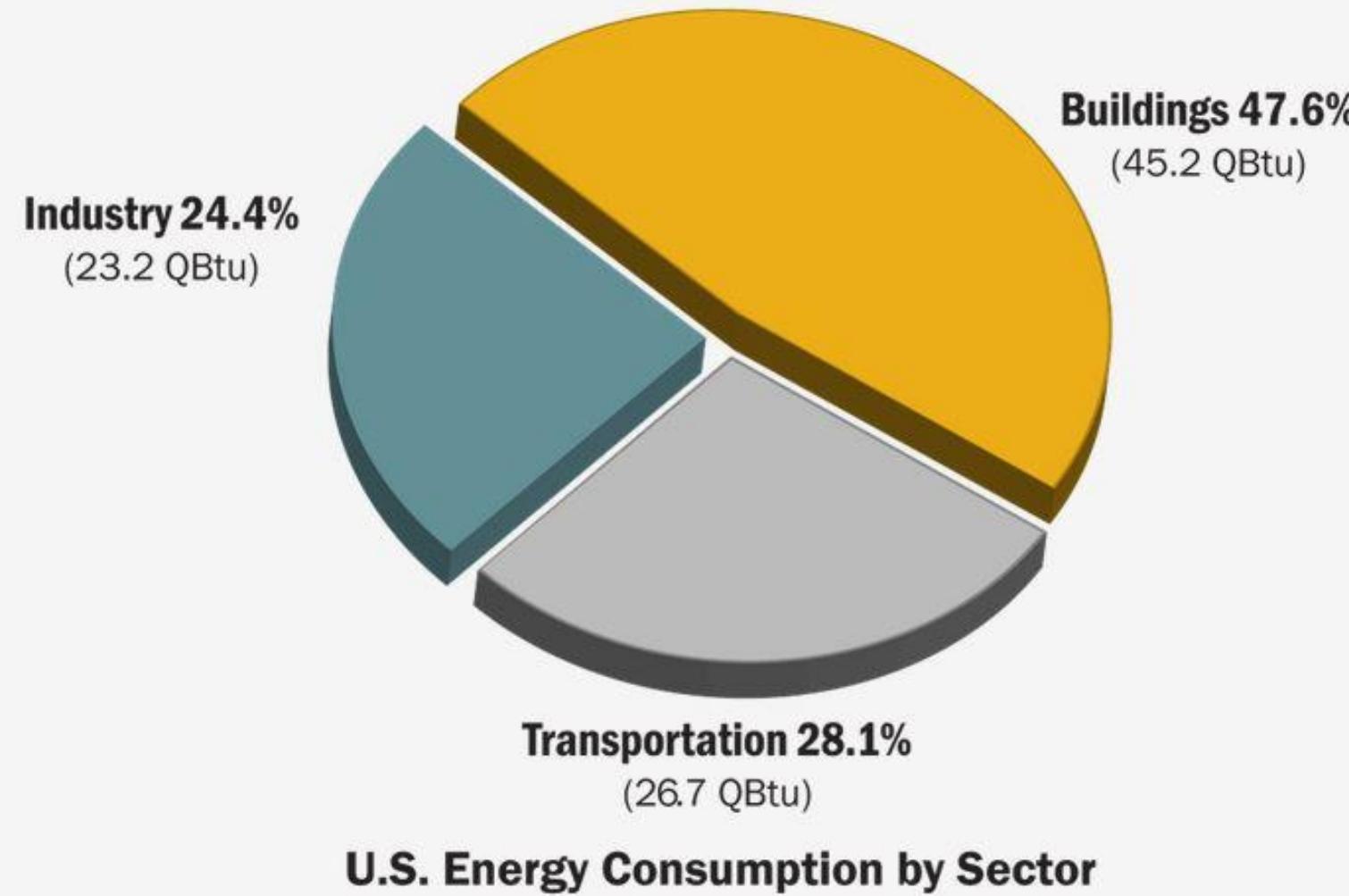
FACT 4

The choices we make **today** will determine how high sea level rises this century, how fast it occurs, and how much time we have to protect our communities.



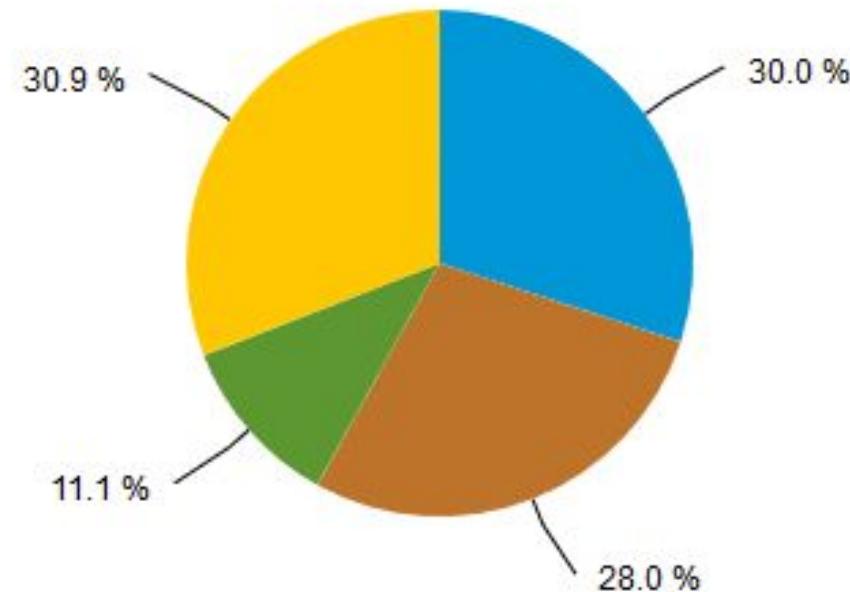
WHY ARE BUILDINGS SO IMPORTANT?

40%
of global energy is
Used in buildings



Massachusetts Energy Consumption by End-Use Sector, 2015

Residential
Commercial
Industrial
Transportation



Source: ©2013 2030, Inc. / Architecture 2030. All Rights Reserved.
Data Source: U.S. Energy Information Administration (2012).



Source: Energy Information Administration, State Energy Data System

EXISTING BUILDINGS

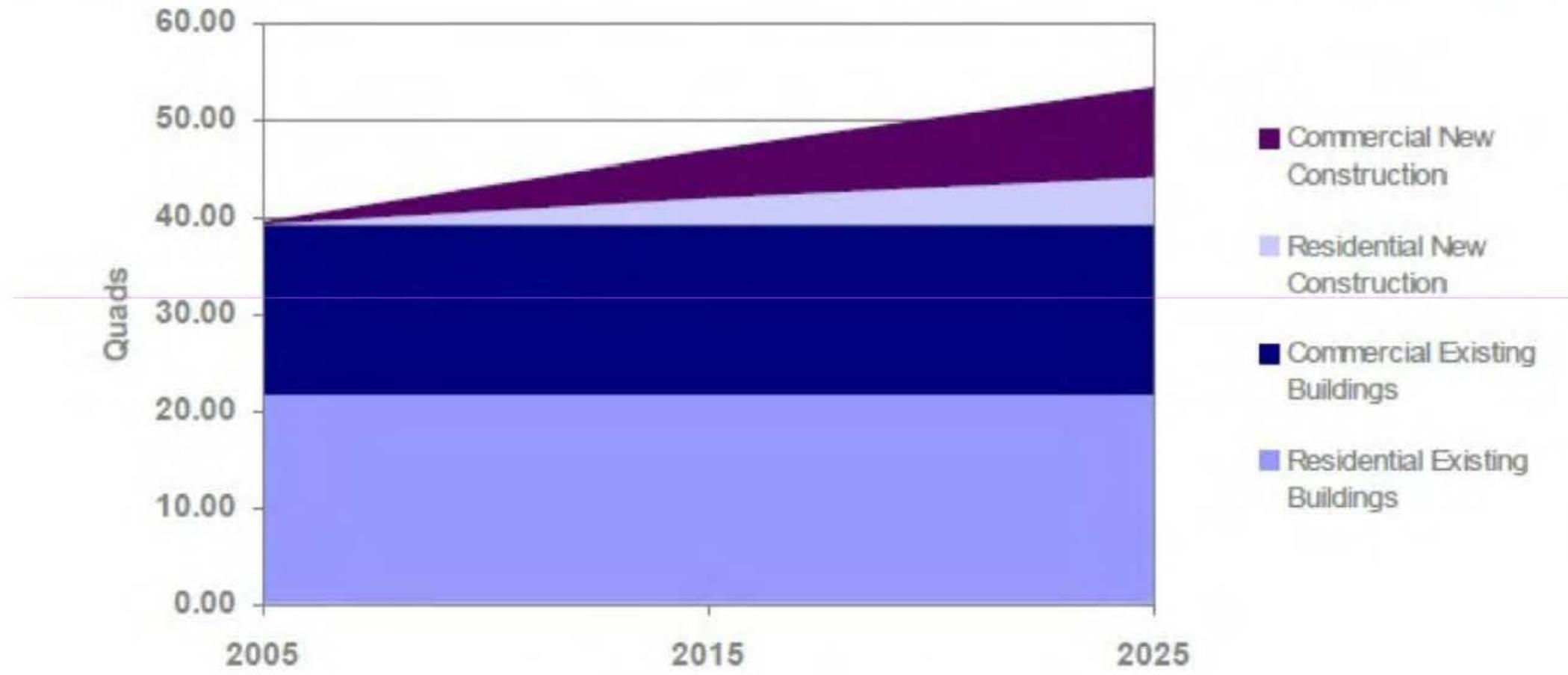
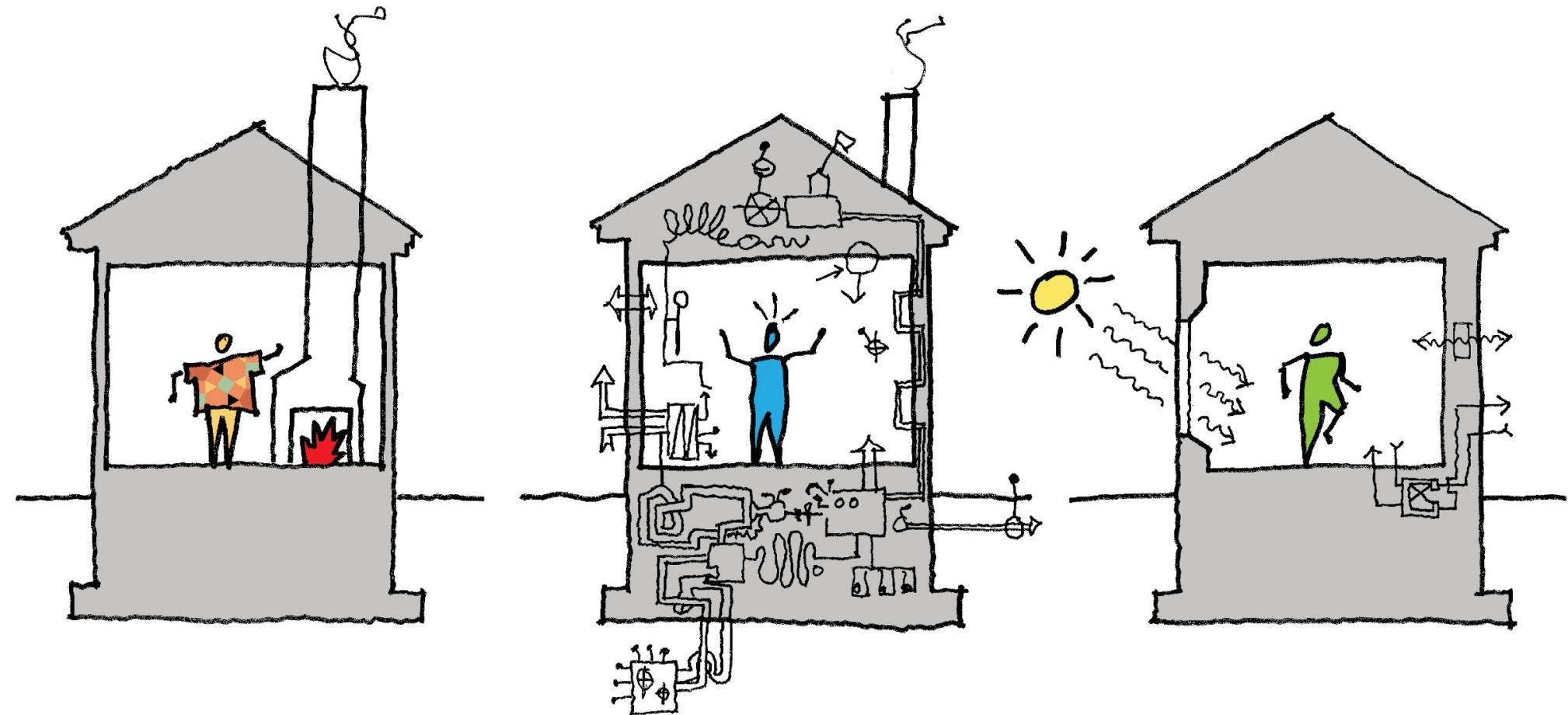


Figure ES3. Base Case Energy Use

Source: IAE Information Paper, Energy Efficiency in the North American Existing Building Stock

THE PASSIVE HOUSE STANDARD

Radical Simplicity



Credit: Albert Righter Tittmann Architects

1E-2E-3=0

THREE STEPS TO NET ZERO OPERATIONAL ENERGY

1 minimize **EUI**

2 eliminate **FOSSIL FUELS**

3 add **RENEWABLES**

0 achieve **NET ZERO**

PASSIVE HOUSE IN ACTION

Distillery North
Finch Cambridge
Harbor Village
The Lighthouses
Hawkins

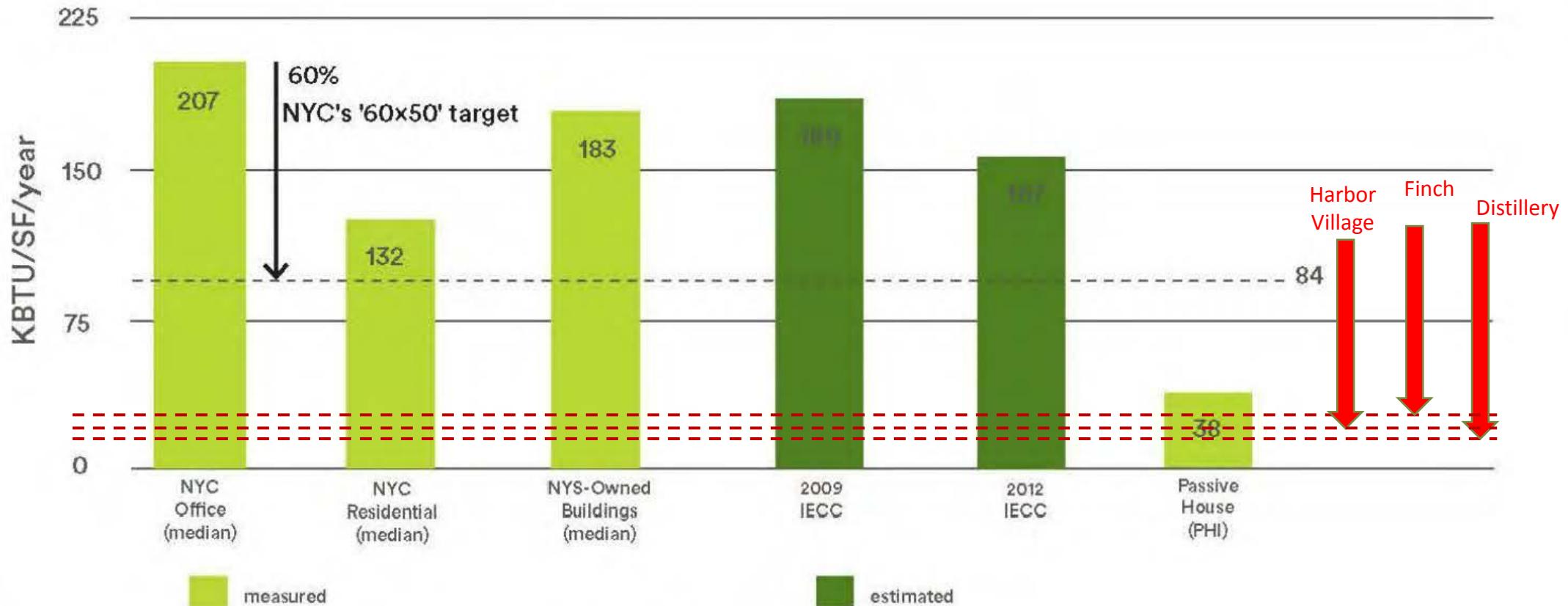
Salem Heights
Simon C. Fireman
555 Merrimack
Ridge Commons
Riverdale

Cape View Way
108 Center
Leefort Terrace
Ingalls Court
Holyoke



PERFORMANCE– Building Inherent Value

Figure 2: Source Energy Use Intensity (EUI) Comparison



Source: New York City Local Law 84 Benchmarking Report, 2013

BUILDING INHERENT VALUE

INTENTION

THE POWER OF DENSITY

INTENTION : Code | Policy | Lending

2015: MA Amendment to the IBC 2015

Accepted as Alternative Compliance path

2018: Mass CEC Passive House Design Incentives

Targeting Affordable Housing Developers

2019: Mass Save Incentives

Targets all Multifamily Developers

Builds Market-Rate attention

2020: DHCD QAP

Incents Passive House above other green building standards

Catalyzes Affordable commitment to Passive House

2022: Draft Net Zero Stretch Code

Considers Passive House as a Compliance Path

Ongoing....Community Advocacy - Municipal Policy – Future Codes?

THE POWER OF DENSITY

More **homes**

Smaller footprint - more **open space**

Less resources (land, materials) – lower **carbon footprint**

More **cost-effective**

More **energy-efficient**

Sensible to go **All-Electric**

Opportunity for **communal space**

FINCH CAMBRIDGE

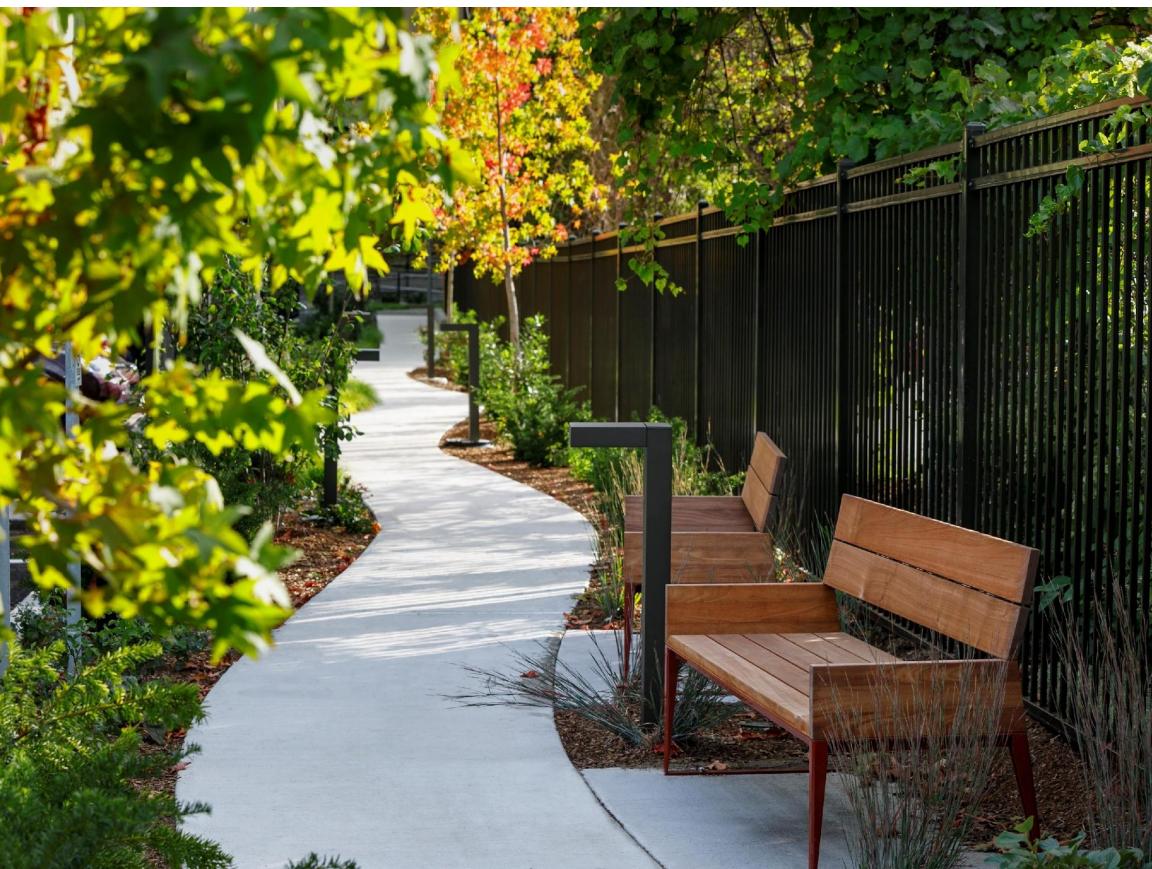
98 Affordable Family Units

Passive House Certified
Enterprise Green Certified
Fitwell Certified

Across the street from Fresh Pond
Direct access to Transit

Leverages existing infrastructure





EXISTING BUILDING RENEWAL

Most sustainable building is the one that's already built
One opportunity every generation or two... or three
Capital improvements must address climate

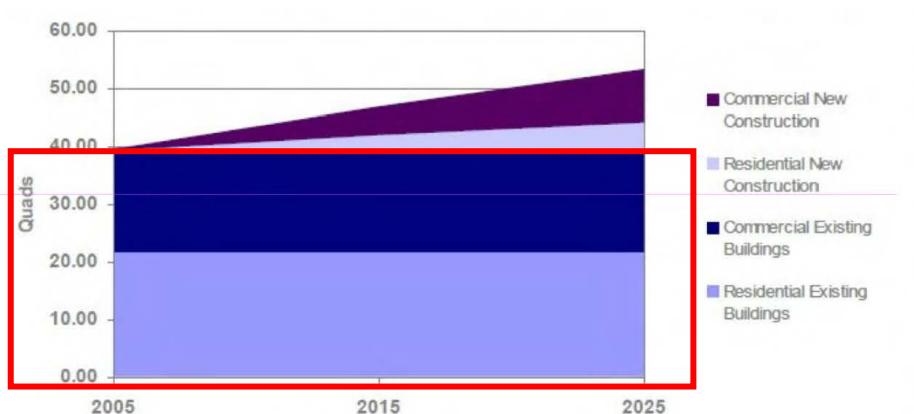


Figure ES3. Base Case Energy Use

Source: IAE Information Paper, Energy Efficiency in the North American Existing Building Stock

SALEM HEIGHTS

281 Units
Occupied Rehab
Passive House
Leverages existing infrastructure
Low Embodied Carbon



What does density look like?











Michelle Apigian
AIA, LEED AP, AICP, CPHC
Associate Principle, Practice + Sustainability Leader
mapigian@iconarch.com
627-939-0721



HOUSING POLICY IS CLIMATE POLICY

MAY 5, 7:00PM



THANK YOU

Recording & slides available on event page:
<https://www.arlingtonma.gov/Home/Components/Calendar/Event/29514/18>